



Dell Inspiron 14z-5423 Motherboard Replacement

This guide will help in replacing the motherboard on the Dell Inspiron 14z-5423.

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INTRODUCTION

The motherboard for this computer allows all of the hardware of the computer to communicate. If this becomes damaged, major problems will occur.



TOOLS:

- [JIS Driver Set](#) (1)
 - [Spudger](#) (1)
 - [Tweezers](#) (1)
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Step 1 — RAM



- Close the display and turn over the computer.

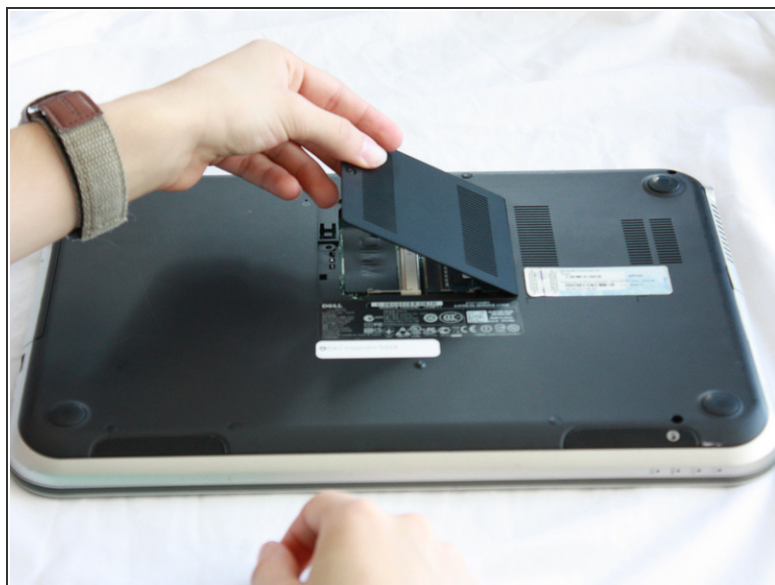
⚠ Make sure your device is powered down and unplugged before beginning the replacement.

Step 2



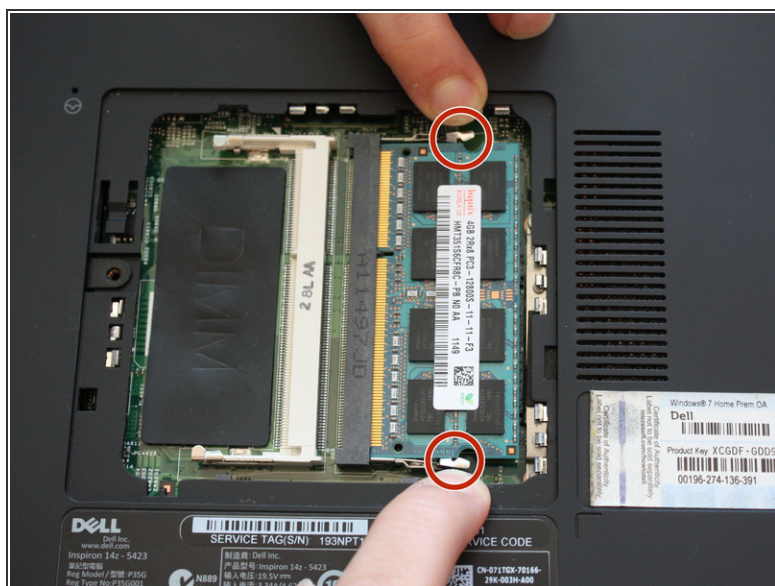
- Use a J0 bit tipped screwdriver to unscrew the one 6 mm Phillips screw on the RAM cover.

Step 3



- Lightly lift the RAM cover up and at an angle, away from the computer.

Step 4



- Use your fingers to carefully pull the securing clips on the RAM away from each other.

i The RAM should pop up when the clips are released.

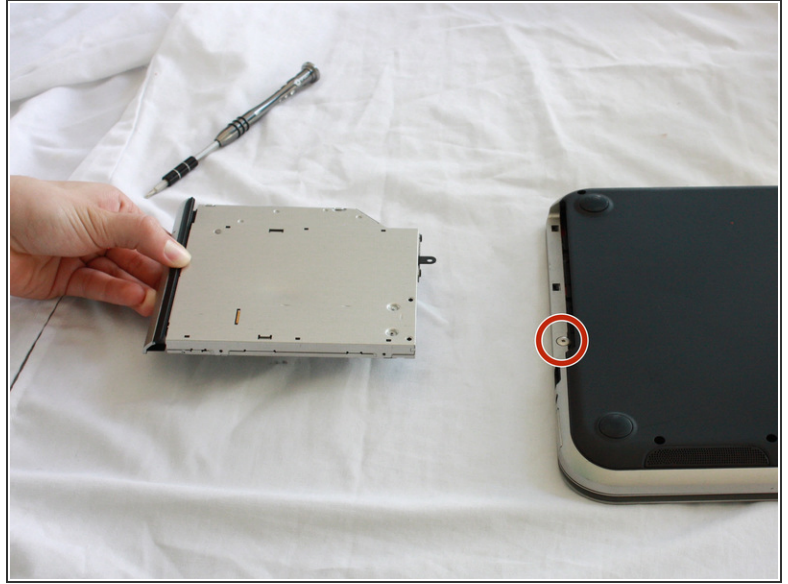
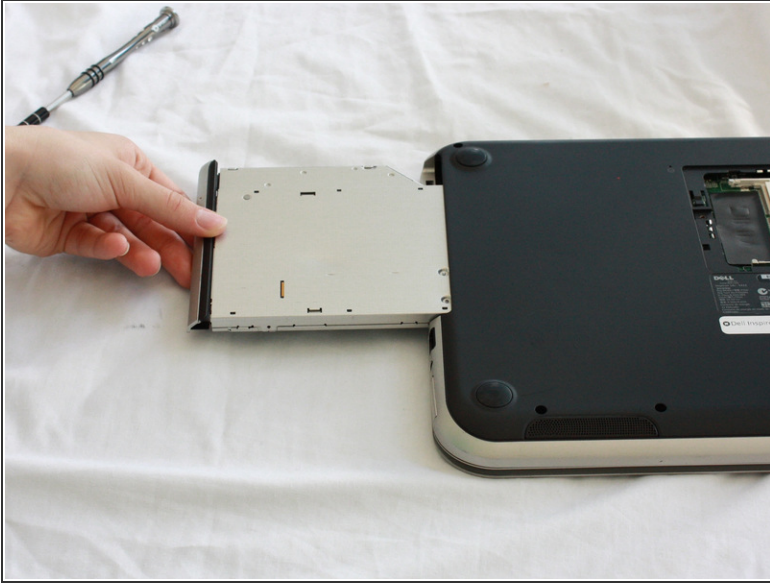
Step 5



- Remove the popped up RAM by pulling it away from the connection.

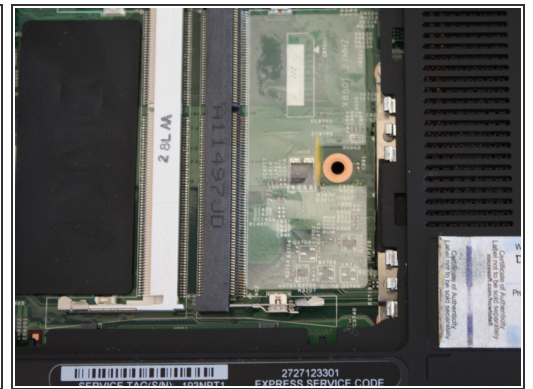
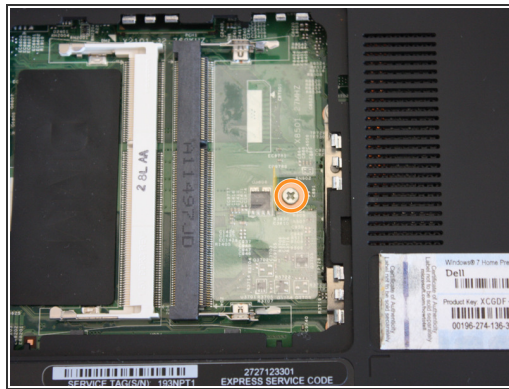
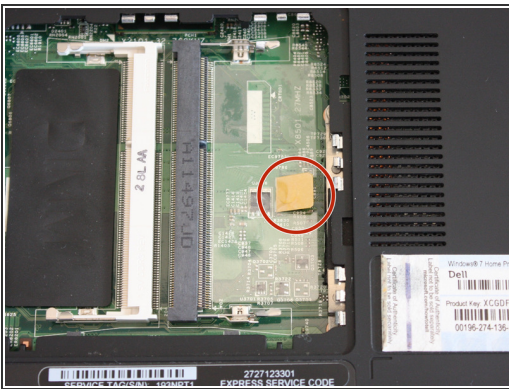
ⓘ If it does not pop up pry it out in a steady and straight direction.

Step 6 — Optical Drive



- Slide the CD/DVD drive on the side of the laptop out using your fingers.
- Using a J0 bit screwdriver, unscrew the one 2 mm Phillips screw.
- ⓘ You only need to unscrew this screw if you are using this as a prerequisite guide.

Step 7 — Keyboard



- Lift the plastic yellow flap on the system board.
- Use the J0 Bit screwdriver to remove the one 6 mm Phillips screw in center of the system board that is connected to the keyboard.

Step 8



- Flip over the computer and open the display.

Step 9



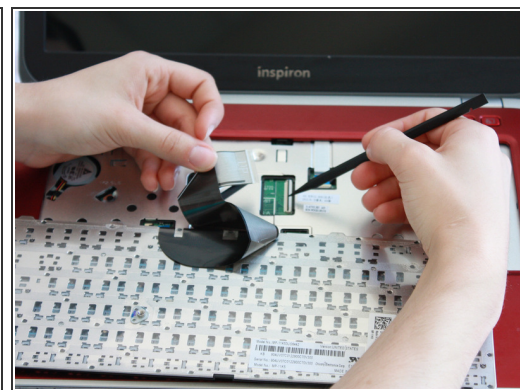
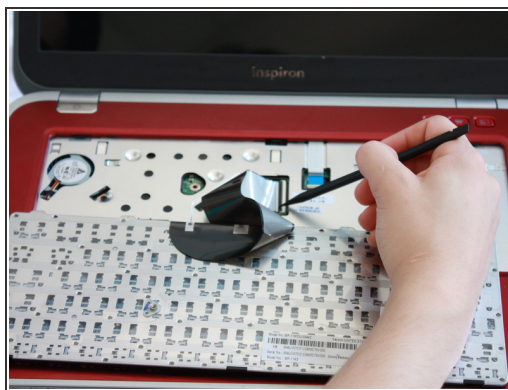
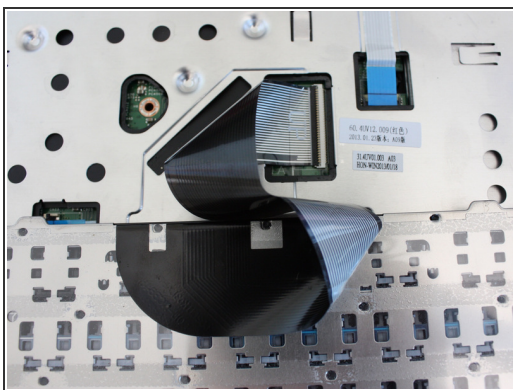
- Insert a spudger next to the plastic indents located at the top of the keyboard and gently pry to release the securing clips.
 - Lift the keyboard off of the computer.
- ⚠ Be careful not to tear the ribbon that attaches the back of the keyboard to the computer when lifting it.

Step 10



- Flip the keyboard over onto the palm-rest assembly.

Step 11



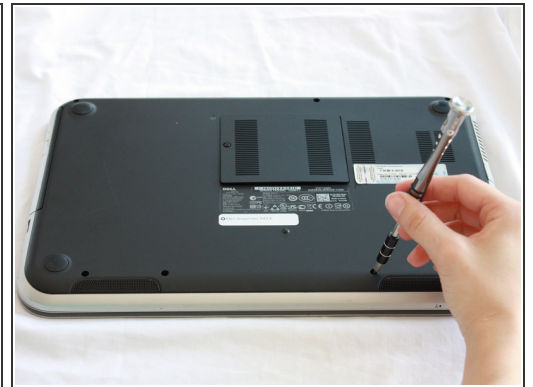
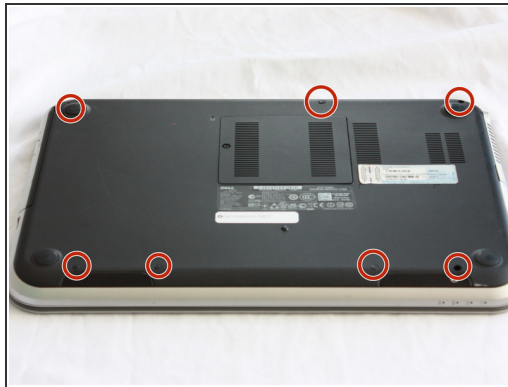
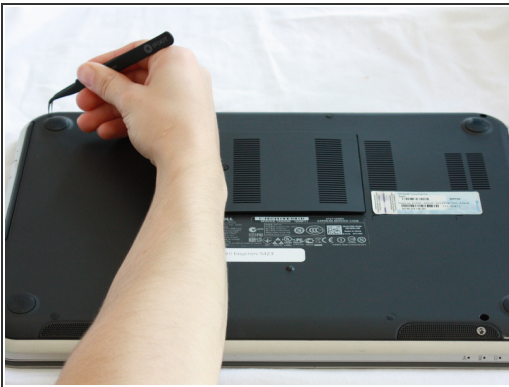
- Flip the little black securing bar near the base of the ribbon with a spudger to release the ribbon from the computer.

Step 12 — Palm Rest Assembly



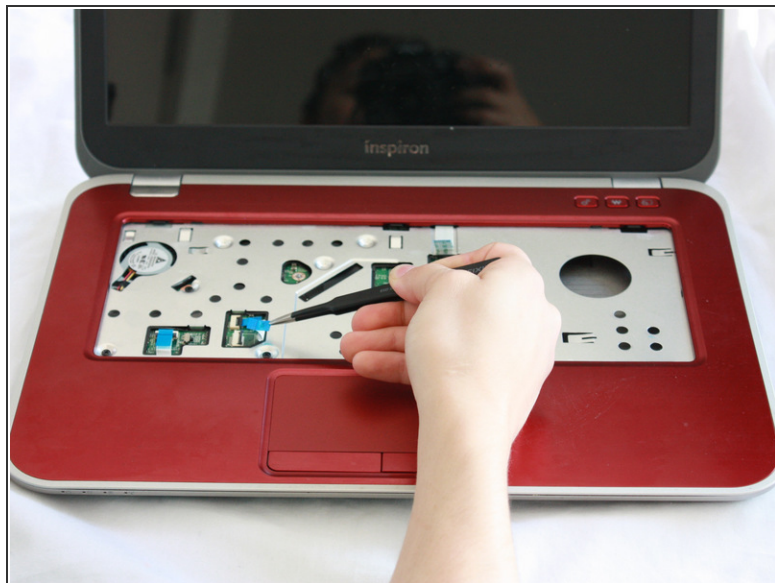
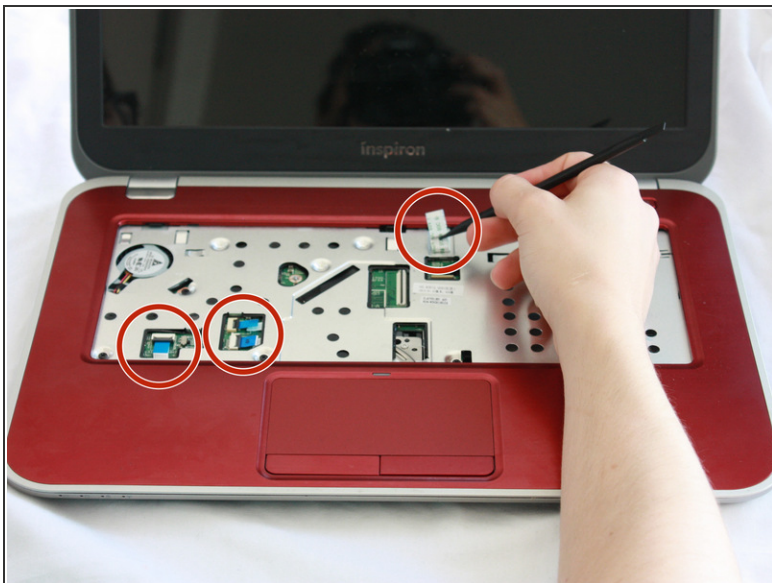
- Close the display and turn over the computer.

Step 13



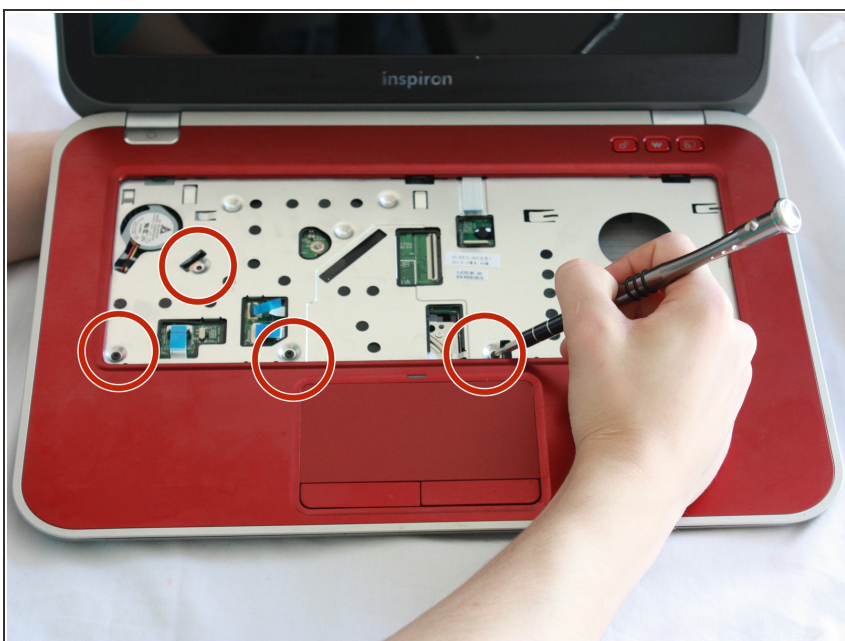
- Remove all 7 rubber screw caps with tweezers.
- Use a J0 Bit tipped screwdriver unscrew the seven 6 mm Phillips screws on the back casing of the laptop.

Step 14



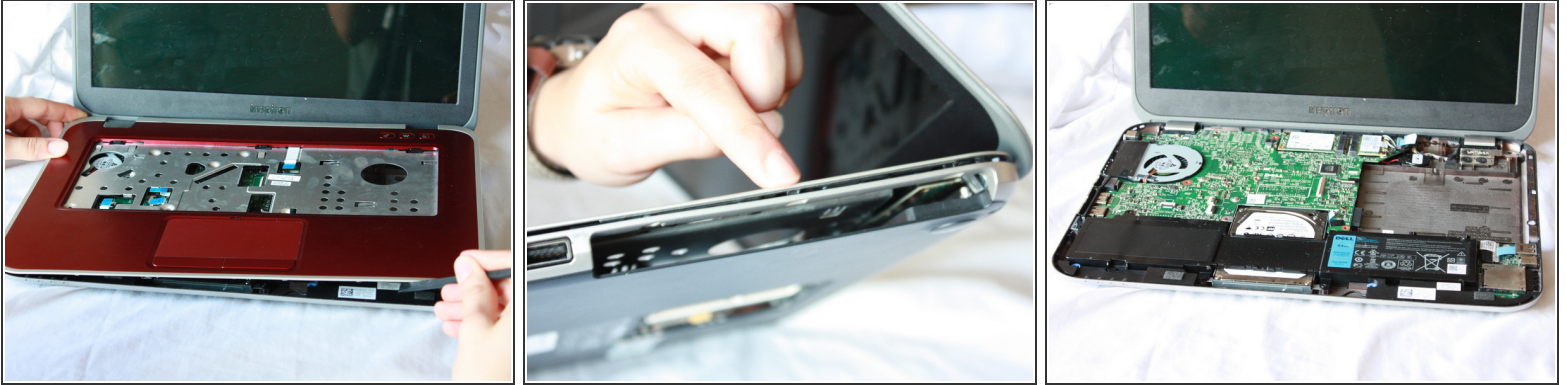
- Flip the computer over and open the display.
- Pull on the blue tabs to disconnect the palm rest assembly from the computer.

Step 15



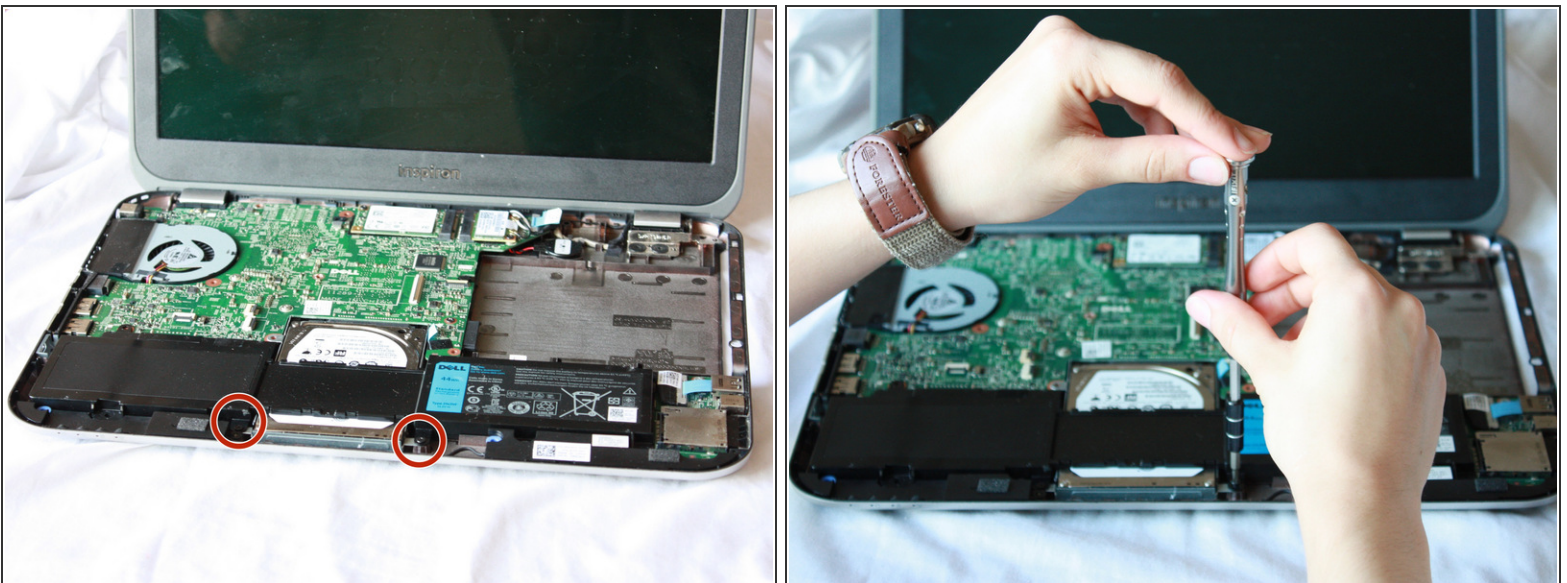
- Use J0 Bit screwdriver to remove all four 6 mm Phillips screws.

Step 16



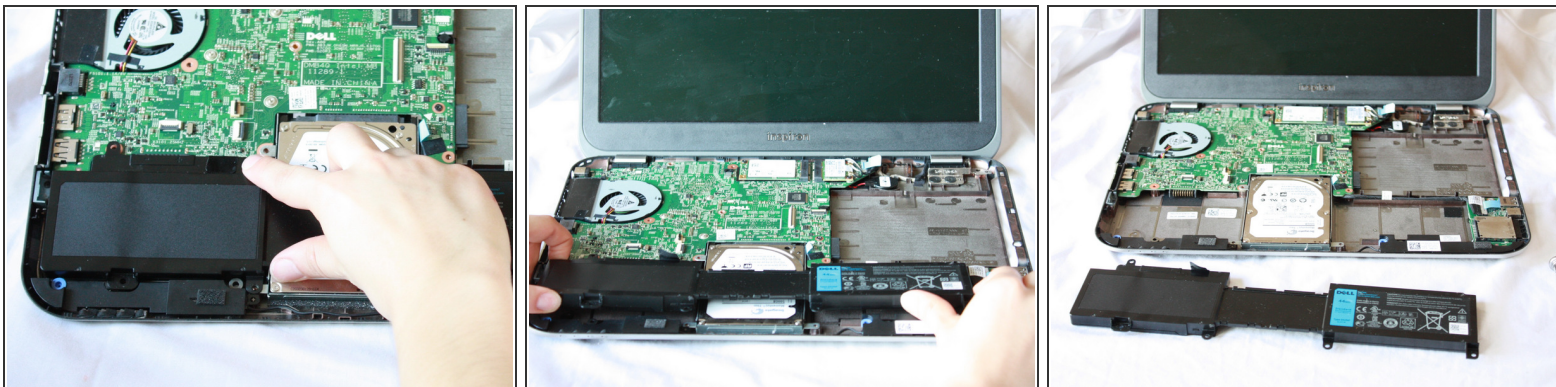
- Gently wedge the nylon spudger underneath the palm-rest assembly to release the latches.
 - Continue this process on all sides of the computer edges until the assembly pulls off.
 - Remove the palm rest assembly.
- i** If you have difficulty lifting up the assembly, you might not have taken out all 7 screws on the bottom of the computer.

Step 17 — Battery



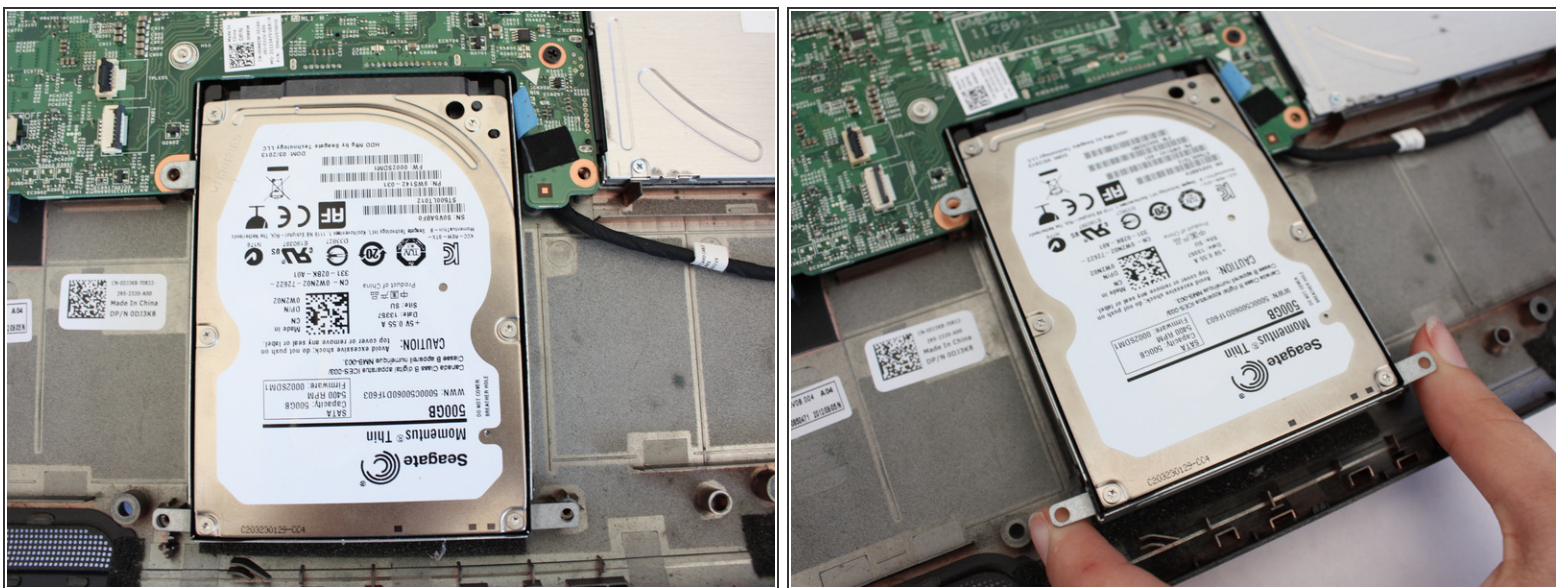
- Use a J0 Bit screwdriver to remove the two 6 mm Phillips screws securing the battery located near the bottom of the laptop.

Step 18



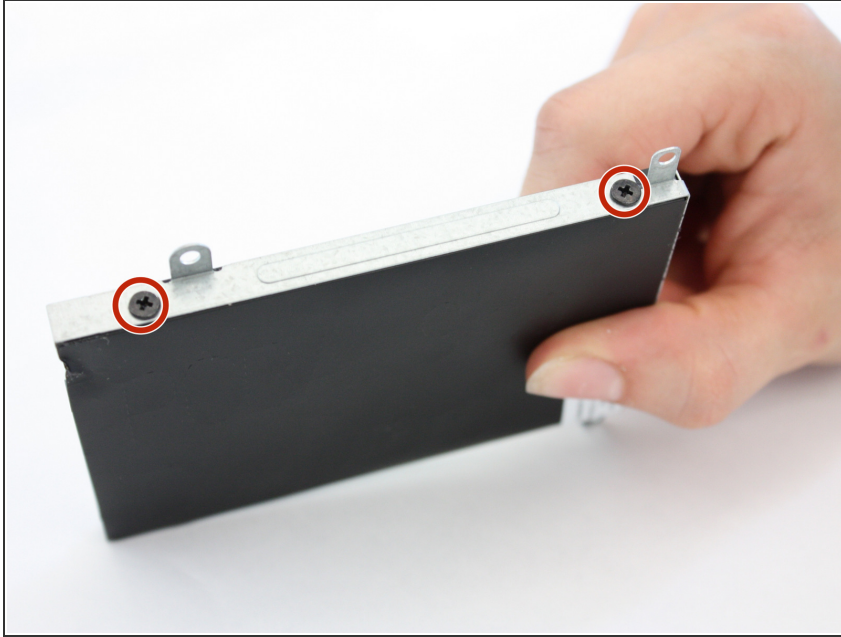
- Lift the tiny black tab and pull the battery out at a slight angle.

Step 19 — Hard Drive



- Lift up the bottom of the hard drive which is located at the bottom of the laptop.
- Gently pull the drive out at an angle using your fingers.

Step 20



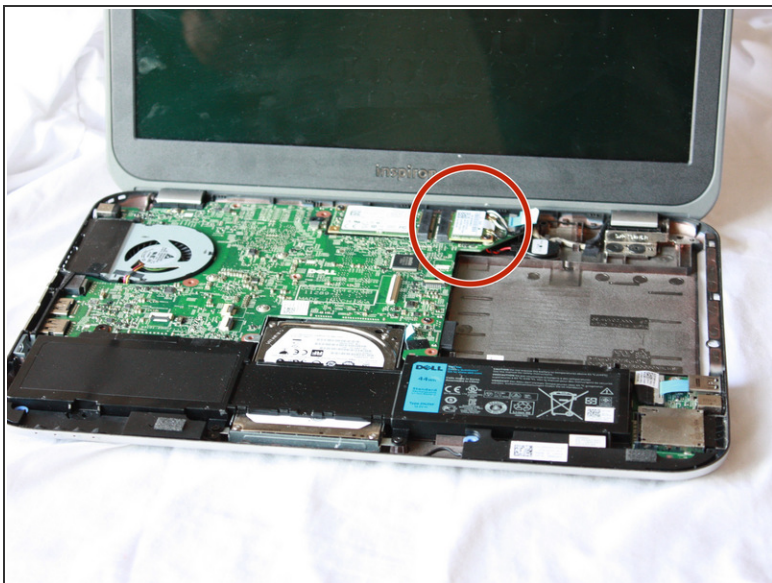
- Using a J0 bit tipped screwdriver, remove the four 3 mm black screws on both sides of the hard drive bracket.

Step 21



- Slide the hard drive out of the bracket.

Step 22 — Wireless Mini Card



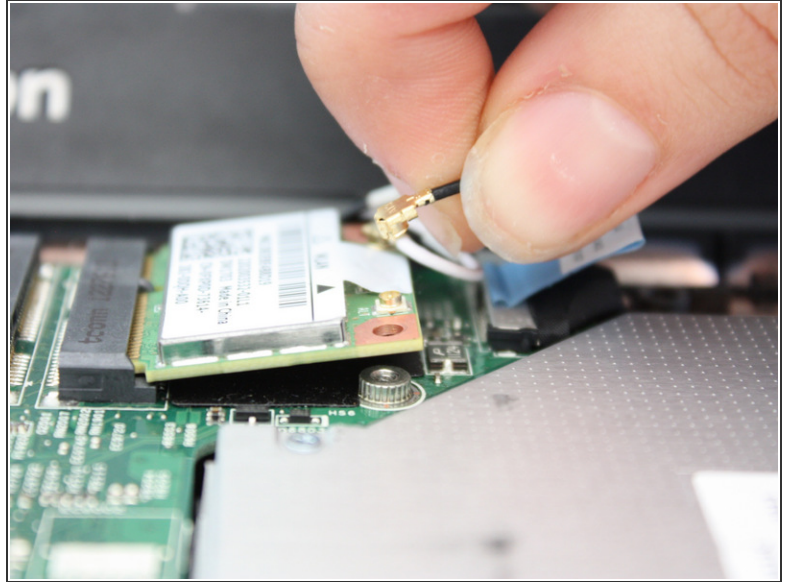
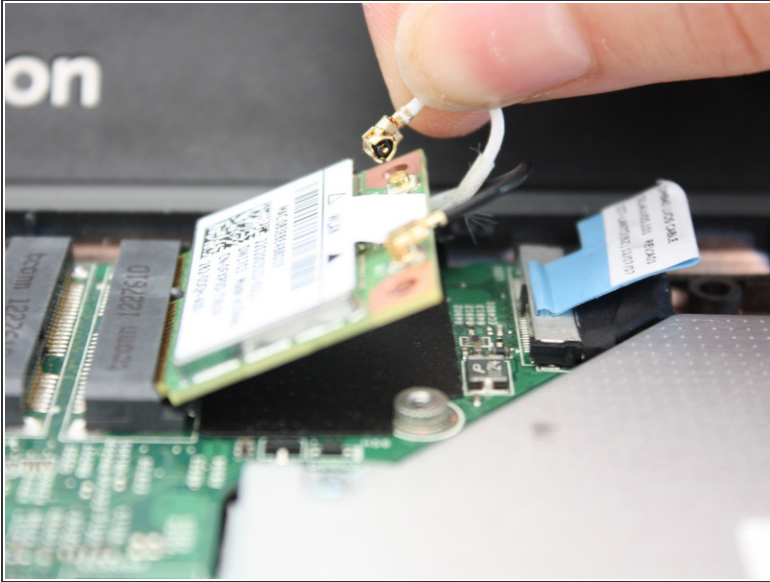
- Locate the wireless mini card at the top of the laptop.
- i** It is next to the place where the optics drive used to be.

Step 23



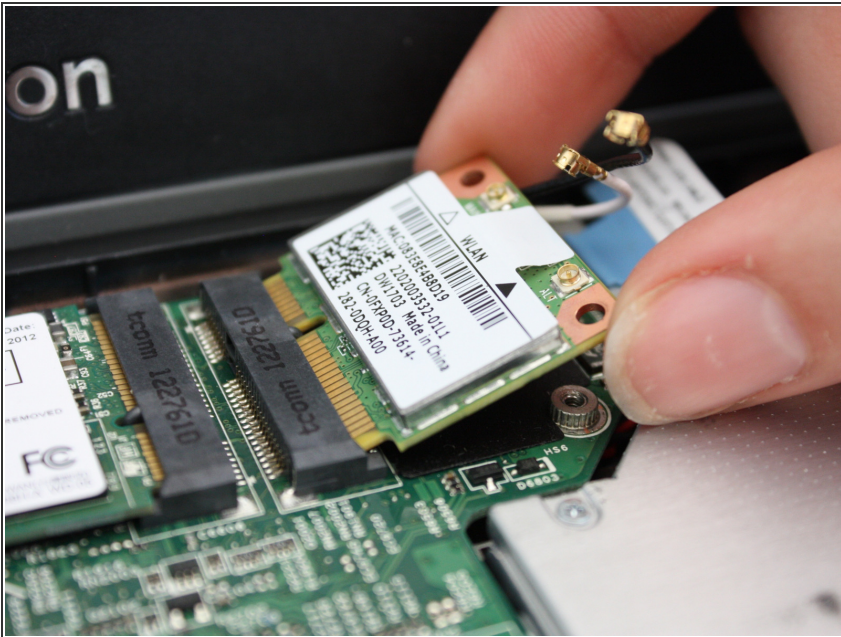
- Using a J0 tipped screwdriver, remove the 4 mm Phillips head screw.

Step 24



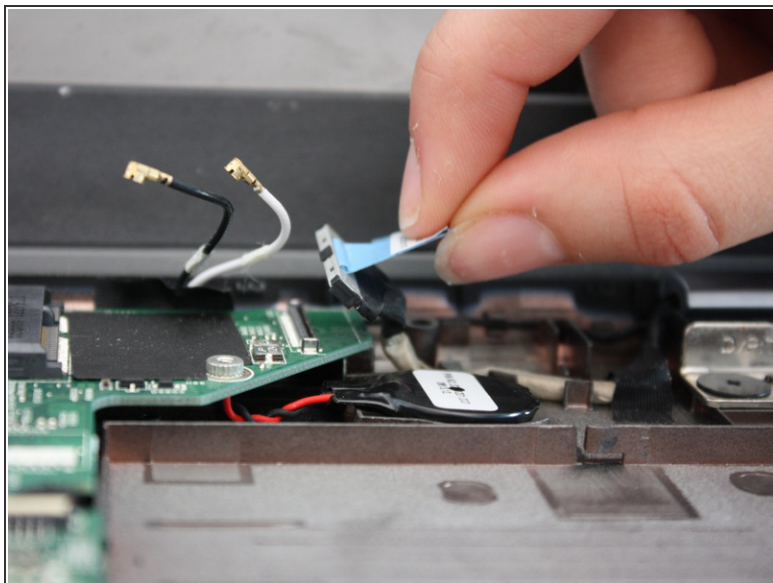
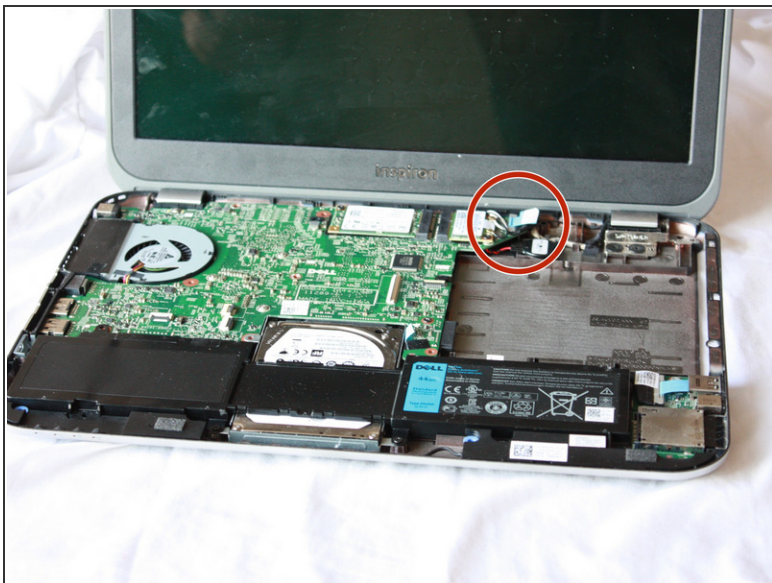
- Gently, unlatch the black and white wires from the wireless mini card.

Step 25



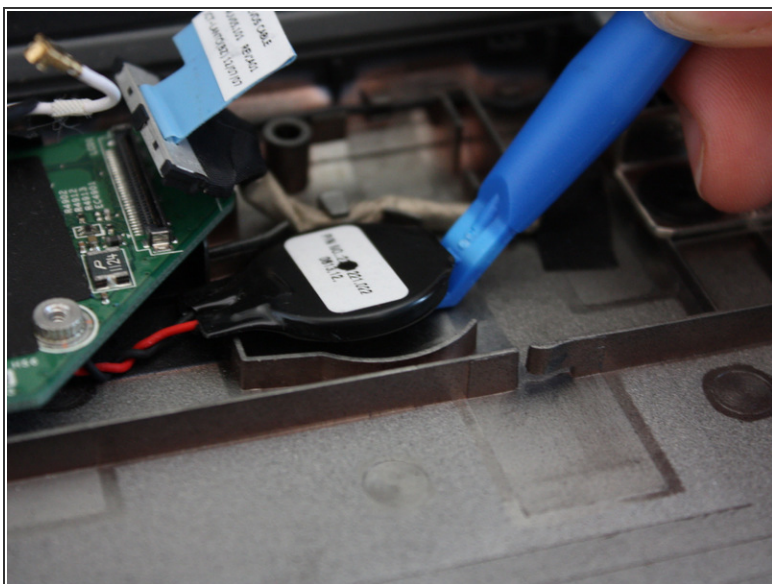
- At an angle, slide out the wireless mini card.

Step 26 — Motherboard



- Gently pull the the blue ribbon upwards to disconnect the computer from the motherboard.

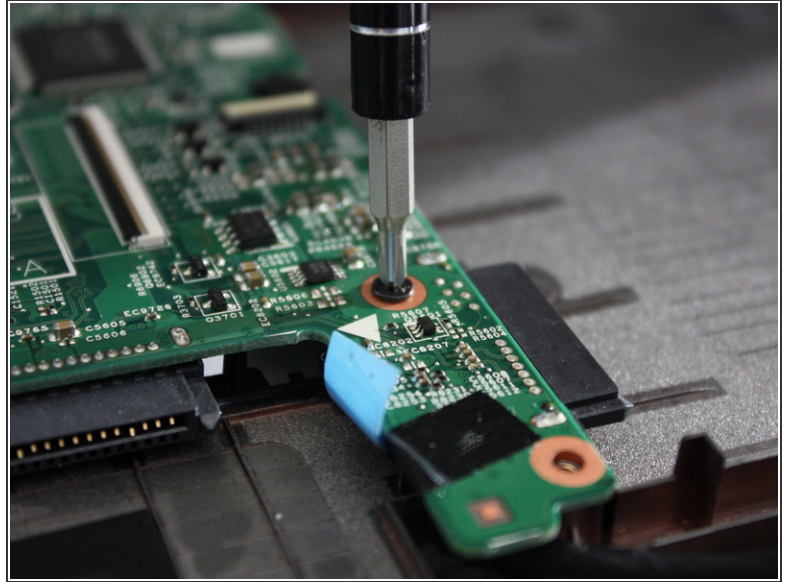
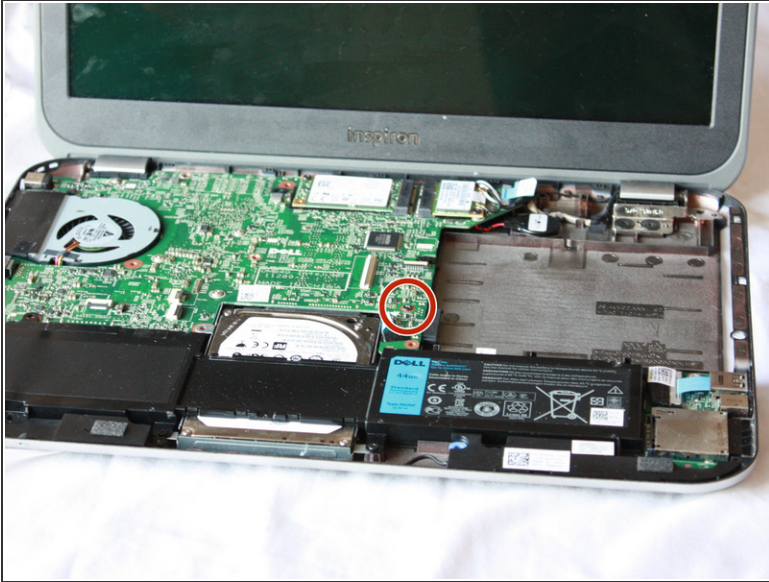
Step 27



- Using a plastic opening tool, gently detach the coin cell battery from the foam glue.

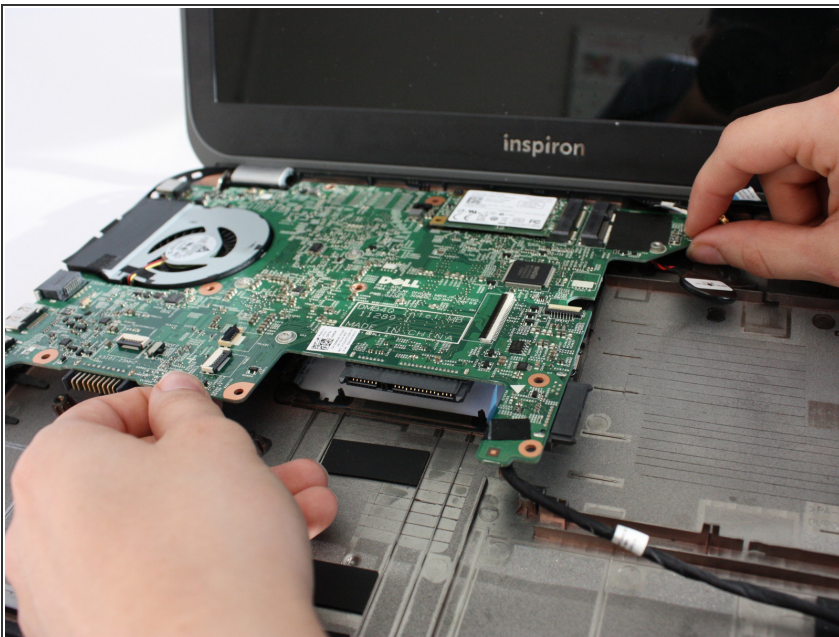
i The coin cell battery is underneath the optical drive.

Step 28



- Using a J0 tipped screwdriver remove the 6 mm Phillips head screw located at the center of the laptop on the motherboard.

Step 29



- Remove motherboard at an upward angle.
- ⓘ The coin cell battery and fan will be removed with the motherboard.

To reassemble your device, follow these instructions in reverse order.

